



An AACR Special Conference on  
**Rethinking DCIS: An  
Opportunity for Prevention?**  
September 8-11 | Philadelphia, PA



**Conference Cochairs:**

Lisa M. Coussens, OHSU Knight Cancer Institute, Portland, Oregon  
Laura J. Esserman, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, California  
Kornelia Polyak, Dana-Farber Cancer Institute, Boston, Massachusetts  
Jorge S. Reis-Filho, Memorial Sloan Kettering Cancer Center, New York, New York

**[R] Remote Presentation**

CME credit is available for in-person attendance for the designated sessions. On-demand presentations are not eligible for CME.

**THURSDAY, SEPTEMBER 8**

**Welcome and Opening Lecture [CME Eligible]**

Liberty Ballroom CD  
6:45 p.m.-7:30 p.m.

**6:45-7:00 p.m.**

**Welcome from Cochairs**

Laura J. Esserman, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, California

**7:00-7:30 p.m.**

**Opening Presentation**

Angela M. Belcher, Massachusetts Institute of Technology, Cambridge, Massachusetts

**Opening Reception**

Liberty Ballroom AB  
7:30 p.m.-10:00 p.m.

**FRIDAY, SEPTEMBER 9**

**7:00 a.m.-8:00 a.m.**

Liberty Ballroom AB

**Breakfast**

**8:00 a.m.-10:00 a.m.**

Liberty Ballroom CD

**Plenary Session 1: Pathology [CME Eligible]**

*Session Chair: Jorge S. Reis-Filho, Memorial Sloan Kettering Cancer Center, New York, New York*

**8:00 a.m.-8:30 a.m.**

**DCIS: Pathological heterogeneity and prognosis definition [R]**

Anne Vincent-Salomon, Institut Curie, Paris, France

8:30 a.m.-9:00 a.m.	<b>Preinvasive breast lesions: an integrated pathology and genomics perspective</b> Jorge S. Reis-Filho, Memorial Sloan Kettering Cancer Center, New York, New York
9:00 a.m.-9:30 a.m.	<b>How to solve the uncomfortable truth of DCIS?</b> Jelle Wesseling, Netherlands Cancer Institute, Amsterdam, The Netherlands
9:30 a.m.-9:45 a.m.	<b>Lightning talks from submitted abstracts</b> <b>Spatial proximity between CD8 + T cells and tumor cells correlates with invasive recurrence in DCIS*</b> Michael Campbell, University of California, San Francisco, San Francisco, California  <b>Genomic predictor can discriminate between high- and low-risk DCIS*</b> Elinor J. Sawyer, King's College London, London, United Kingdom  <b>Pioneering genetic rat models of Ductal Carcinoma in situ (DCIS)*</b> Catrin Lutz, Netherlands Cancer Institute (NKI), Amsterdam, The Netherlands
9:45 a.m.-10:00 a.m.	Discussion
<b>10:00 a.m.–10:30 a.m.</b> Liberty Ballroom Foyer	<b>Break</b>
<b>10:30 a.m.–12:20 p.m.</b> Liberty Ballroom CD	<b>Plenary Session 2: Artificial Intelligence [CME Eligible]</b> <i>Session Chair: Jorge S. Reis-Filho, Memorial Sloan Kettering Cancer Center, New York, New York</i>
10:30 a.m.-11:00 a.m.	<b>Artificial intelligence for breast pathology: Challenges and opportunities (and more challenges!)</b> Michael G. Drage, PathAI, Inc., Boston, Massachusetts
11:00 a.m.-11:30 a.m.	<b>Co-evolving artificial intelligence and pathology</b> Yinyin Yuan, Institute of Cancer Research, London, United Kingdom

\*Lightning Talk selected from proffered abstracts

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11:30 a.m.-11:35 a.m.	<b>Lightning talks from submitted abstracts</b>  <b>Radiogenomics for predicting underestimation of invasiveness in ductal carcinoma in situ (DCIS) diagnosed with vacuum assisted breast biopsy: study rationale and design*</b> Matteo Lazzeroni, European Institute of Oncology IRCCS, Milan, Italy
11:35 a.m.-12:05 p.m.	<b>Breast pathology and AI: Are we there yet? [R]</b> Matthew G. Hanna, Memorial Sloan Kettering Cancer Center, New York, New York
12:05 p.m.-12:20 p.m.	Discussion
<b>12:20 p.m.–2:00 p.m.</b> Liberty Ballroom AB	<b>Poster Session A/ Lunch (provided)</b>
<b>2:15 p.m.–4:45 p.m.</b> Liberty Ballroom CD <i>Session Chair: Jos Jonkers, Netherlands Cancer Institute, Amsterdam, The Netherlands</i>	<b>Plenary Session 3: Model Systems [CME Eligible]</b>
2:15 p.m.-2:45 p.m.	<b>Mouse-INtraDuctal (MIND): An in vivo model for the discovery of epithelial/stromal cross talks that drive DCIS invasive and metastatic progression</b> Fariba Behbod, University of Kansas Medical Center, Kansas City, Kansas
2:45 p.m.-3:15 p.m.	<b>Title to be announced</b> Senthil K. Muthuswamy, Beth Israel Deaconess Medical Center, Boston, Massachusetts
3:15 p.m.-3:30 p.m.	<b>Lightning talks from submitted abstracts</b>  <b>Intraductal administration of a recombinant transferrin receptor-directed immunotoxin clears ductal carcinoma in situ in preclinical mammary in-duct (MIND) models of breast cancer*</b> Saraswati Sukumar, Johns Hopkins University School of Medicine, Baltimore, Maryland

\*Lightning Talk selected from proffered abstracts

**A living biobank of patient-derived ductal carcinoma in situ (DCIS) Mouse-INtraDuctal (MIND) xenografts identifies multiple risk factors of invasive progression\***

Stefan Hutten, Netherlands Cancer Institute, Amsterdam, The Netherlands

**Candidate antigens for a ductal carcinoma in situ vaccine, essential for breast cancer cell survival across multiple subtypes, are immunogenic in DCIS and IBC\***

Sasha Stanton, Earle A. Chiles Research Institute, Portland, Oregon

**3:30 p.m.-4:00 p.m. Patient-derived and genetically engineered models of Ductal Carcinoma in Situ**

Jos Jonkers, Netherlands Cancer Institute, Amsterdam, The Netherlands

**4:00 p.m.-4:30 p.m. Patient-derived organoids as models for breast cancer prevention and interception**

Jennifer Rosenbluth, University of California, San Francisco, San Francisco, California

**4:30 p.m.-4:45 p.m. Discussion**

**4:45 p.m.-5:15 p.m. Break**

Liberty Ballroom Foyer

**5:15 p.m.-7:35 p.m. Open Satellite Session: Updates from the Human Tumor Atlas Network and PRECISION Consortia [Not CME Eligible]**

Liberty Ballroom CD

Chairs: Robert West, Stanford University, Stanford, California and Jelle Wesseling, Netherlands Cancer Institute, Amsterdam, The Netherlands

**5:15 p.m.-5:45 p.m. Session 1: Spatial Genomics**

*Moderators: Robert West, Stanford University, Stanford, California and Esther H. Lips Netherlands Cancer Institute, Amsterdam, The Netherlands*

**5:15 p.m.-5:20 p.m. Introduction**

Robert West, Stanford University, Stanford, California and Esther H. Lips Netherlands Cancer Institute, Amsterdam, The Netherlands

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- 5:20 p.m.-5:35 p.m.      **Mammary epithelial architecture modulates field cancerization**  
Hendrik Messal, Netherlands Cancer Institute, Amsterdam, The Netherlands
- 5:35 p.m.-5:50 p.m.      **A single-cell and spatial investigation of tumor and TME for DCIS**  
Runmin Wei, UT MD Anderson Cancer Center, Houston, Texas
- 5:50 p.m.-6:05 p.m.      Panel Discussion
- 6:05 p.m.-7:20 p.m.      Session 2: How Can We Optimize Risk Stratification Over Time for DCIS?**  
*Moderator: Jelle Wesseling, Netherlands Cancer Institute, Amsterdam, The Netherlands*
- 6:05 p.m.-6:20 p.m.      **Artificial intelligence for TIL scoring (AI-TIL)**  
Yinyin Yuan, Institute of Cancer Research, London, United Kingdom
- 6:20 p.m.-6:35 p.m.      **The DCIS: A biological challenge and clinical dilemma**  
Sudhir Srivastava, National Cancer Institute, Bethesda, Maryland
- 6:35 p.m.-6:50 p.m.      **Artificial intelligence approaches to DCIS grading and recurrence prediction**  
Jonas Teuwen, Netherlands Cancer Institute, Amsterdam, The Netherlands
- 6:50 p.m.-7:05 p.m.      **Managing large-scale consortia**  
Jelle Wesseling
- 7:05 p.m.-7:20 p.m.      Panel Discussion

## **SATURDAY, SEPTEMBER 10**

**7:00 a.m.-8:00 a.m.      Breakfast**  
Liberty Ballroom AB

**8:00 a.m.-10:00 a.m.      Plenary Session 4: What is the role of our current surgical treatments? [CME Eligible]**  
Liberty Ballroom CD  
*Session Chair: Alistair Thompson, Dan L. Duncan Comprehensive Cancer Center, Houston, Texas*

8:00 a.m.-8:30 a.m.      **Surgery for DCIS: If, what and when**

\*Lightning Talk selected from proffered abstracts

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Alistair Thompson, Dan L. Duncan Comprehensive Cancer Center, Houston, Texas

8:30 a.m.-9:00 a.m.

**After DCIS surgery, what next? The prevention of future breast events**

Seema A. Khan, Robert H. Lurie Comprehensive Cancer Center of Northwestern University, Chicago, Illinois

9:00 a.m.-9:10 a.m.

**Lightning talks from submitted abstracts**

**Duration of endocrine treatment for DCIS impacts second events: Insights from a large registry of cases at two academic medical centers\***

Gillian Hirst, University of California San Francisco, San Francisco, California

**Breast Cancer (BC) risk reduction in young women with Ductal Carcinoma in Situ (DCIS)\***

Megan Tesch, Dana-Farber Cancer Institute, Boston, Massachusetts

9:10 a.m.-9:40 a.m.

**Challenges in conducting active surveillance for DCIS**

Thomas Lynch, Duke Cancer Institute, Durham, North Carolina

9:40 a.m.-10:00 a.m.

Discussion

**10:00 a.m.–10:30 a.m.**

Liberty Ballroom Foyer

**Break**

**10:30 a.m.–12:40 p.m.**

Liberty Ballroom CD

**Plenary Session 5: Imaging [CME Eligible]**

*Session Chair: Heather Greenwood, University of California San Francisco, San Francisco, California*

10:30 a.m.-11:00 a.m.

**Imaging tools for DCIS: Past, present and future**

Constance Lehman, Harvard University/Massachusetts General Hospital, Boston, Massachusetts

11:00 a.m.-11:30 a.m.

**MR Imaging of active surveillance of DCIS - What we have learned so far**

Heather Greenwood, University of California San Francisco, San Francisco, California

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11:30 a.m.-11:40 a.m.     **Lightning talks from submitted abstracts**

**Characterizing N-glycan profiles of DCIS progression using tissue imaging MALDI mass spectrometry\***

Elizabeth Wallace, Medical University of South Carolina, Charleston, South Carolina

**DCIS-associated myoepithelial cells drive tumor progressive inflammation through up-regulation of integrin  $\alpha\text{v}\beta\text{6}$ \***

Michael Allen, Queen Mary University of London, Barts Cancer Institute, London, United Kingdom

11:40 a.m.-12:10 p.m.     **Ductal carcinoma in situ (DCIS) and MRI: Challenges translating MRI depiction of DCIS to improved clinical performance and future opportunities to optimize treatment**

Habib Rahbar, University of Washington School of Medicine, Seattle, Washington

12:10 p.m.-12:40 p.m.     **Image-based risk assessment**

Regina Barzilay, Massachusetts Institute of Technology, Cambridge, Massachusetts

**12:40 p.m.–2:30 p.m.     Lunch on own**

**2:30 p.m.–4:30 p.m.     Plenary Session 6: Controversies in Clinical Care (debate format)**  
**[CME Eligible]**

Liberty Ballroom CD

*Moderator: Laura J. Esserman, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, California*

**DCIS should not be called cancer**

2:30 p.m.-2:45 p.m.     Jennifer L. Marti, Weill Cornell Medicine, New York, New York

**2:45 p.m.-3:00 p.m.     DCIS or cancer? Why all the confusion?**

Steven Narod, Women's College Research Institute, Toronto, Canada

3:00 p.m.-3:30 p.m.     Discussion

**It is time to rethink local therapy for DCIS-enhanced image guided radiation therapy?**

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3:30 p.m.-3:45 p.m.	For: Nicolas D. Prionas, University of California San Francisco, San Francisco, California
3:45 p.m.-4:00p.m.	Against: Bruce Mann, Royal Melbourne Hospital, Parkville, Australia
4:00 p.m.-4:30 p.m.	Discussion
<b>4:45 p.m.-7:00 p.m.</b> Liberty Ballroom AB	<b>POSTER SESSION B / RECEPTION</b>

### **SUNDAY, SEPTEMBER 11**

**7:00 a.m.-8:00 a.m.**      **Breakfast**  
Liberty Ballroom AB

**8:00 a.m.-9:45 a.m.**      **Plenary Session 7: Molecular Sequencing [CME Eligible]**  
Liberty Ballroom CD  
*Session Chair: Kornelia Polyak, Dana-Farber Cancer Institute, Boston, Massachusetts*

8:00 a.m.-8:30 a.m.      **Molecular subtypes and spatial heterogeneity in DCIS**  
Therese Sørbye, Oslo University Hospital, Oslo, Norway

8:30 a.m.-9:00 a.m.      **Decoding DCIS progression & recurrence with single cell genomics**  
Nicholas E. Navin, UT MD Anderson Cancer Center, Houston, Texas

9:00 a.m.-9:30 a.m.      **Spatial ontologies for predicting invasive progression in ductal carcinoma in situ**  
R. Michael Angelo, Stanford University, Stanford, California

9:30 a.m.-9:45 a.m.      Discussion

**9:45 a.m.-10:15 a.m.**      **Break**  
Liberty Ballroom Foyer

**10:15 a.m.-12:00 p.m.**      **Plenary Session 8: Microenvironment [CME Eligible]**  
Liberty Ballroom CD  
*Session Chair: Kornelia Polyak, Dana-Farber Cancer Institute, Boston, Massachusetts*

10:15 a.m.-10:45 a.m.      **What is an invasion permissive/promoting microenvironment? Clues for prevention**

\*Lightning Talk selected from proffered abstracts

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Alexander D. Borowsky, University of California-Davis, Davis, California

10:45 a.m.-11:15 a.m.     **Compromised myoepithelial cell differentiation correlates with DCIS to IDC transition**

Pepper Schedin, Oregon Health & Science University, Portland, Oregon

11:15 a.m.-11:45 a.m.     **DCIS to IDC progression - a key step of immune escape**

Kornelia Polyak, Dana-Farber Cancer Institute, Boston, Massachusetts

11:45 a.m.-12:00 p.m.     Discussion

**12:15 p.m.-1:00 p.m.     Closing Keynote [CME Eligible]**

Liberty Ballroom CD

*Session Chair: Kornelia Polyak, Dana-Farber Cancer Institute, Boston, Massachusetts*

**The hitchhikers guide to the universe of DCIS**

Laura J. Esserman, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, California

**1:00 p.m.**

**Closing Remarks**

Laura J. Esserman, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, California

Kornelia Polyak, Dana-Farber Cancer Institute, Boston, Massachusetts

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